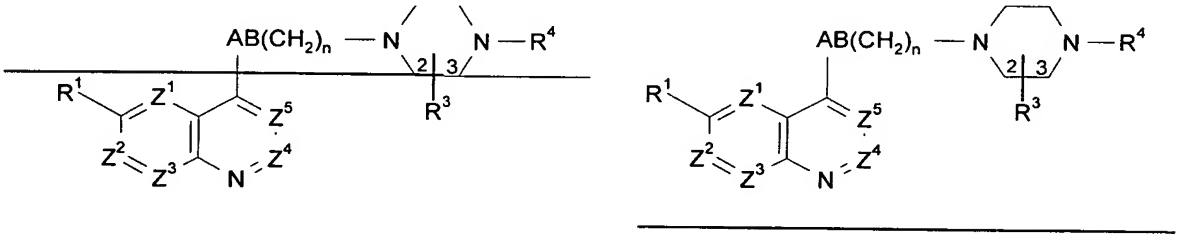
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 **(Currently Amended).** A compound of formula (I) or a pharmaceutically acceptable ~~derivative~~ **salt and/or N-oxide** thereof:



(I)

wherein:

one of Z^1, Z^2, Z^3, Z^4 and Z^5 is N, one is CR^{1a} and the remainder are CH, or one of Z^1, Z^2, Z^3, Z^4 and Z^5 is CR^{1a} and the remainder are CH;

R^1 is selected from hydroxy; (C_{1-6}) alkoxy optionally substituted by (C_{1-6})alkoxy, amino, piperidyl, guanidino or amidino optionally N-substituted by one or two (C_{1-6})alkyl, acyl or (C_{1-6})alkylsulphonyl groups, NH_2CO, hydroxy, thiol, (C_{1-6})alkylthio, heterocyclylthio, heterocyclyloxy, arylthio, aryloxy, acylthio, acyloxy or (C_{1-6})alkylsulphonyloxy; (C_{1-6})alkoxy-substituted (C_{1-6})alkyl; halogen; (C_{1-6})alkyl; (C_{1-6})alkylthio; nitro; azido; acyl; acyloxy; acylthio; (C_{1-6})alkylsulphonyl; (C_{1-6})alkylsulphoxide; arylsulphonyl; arylsulphoxide or an amino, piperidyl, guanidino or amidino group optionally N-substituted by one or two (C_{1-6})alkyl, acyl or (C_{1-6})alkylsulphonyl groups, or when one of Z^1, Z^2, Z^3, Z^4 and Z^5 is N, R^1 may instead be hydrogen;

R^{1a} is selected from H and the groups listed above for R^1;

R^3 is hydrogen; or
R^3 is in the 2- or 3-position and is:
carboxy; (C_{1-6})alkoxycarbonyl; aminocarbonyl wherein the amino group is optionally substituted by hydroxy, (C_{1-6})alkyl, hydroxy(C_{1-6})alkyl, aminocarbonyl(C_{1-6})alkyl, (C_{2-6})alkenyl, (C_{1-6})alkylsulphonyl, trifluoromethylsulphonyl, (C_{1-6})alkenylsulphonyl, (C_{1-6})alkoxycarbonyl, (C_{1-6})alkylcarbonyl, (C_{2-6})alkenyloxycarbonyl or (C_{2-6})alkenylcarbonyl and optionally further substituted by (C_{1-6})alkyl, hydroxy(C_{1-6})alkyl, aminocarbonyl(C_{1-6})alkyl or (C_{2-6})alkenyl; cyano; tetrazolyl; 2-oxo-oxazolidinyl optionally substituted by R^{10}; 3-hydroxy-3-cyclobutene-1,2-dione-4-yl; 2,4-thiazolidinedione-5-yl; tetrazol-5-ylaminocarbonyl; 1,2,4-triazol-5-yl optionally substituted by R^{10}; or 5-oxo-1,2,4-oxadiazol-3-yl; or

R^3 is in the 2- or 3-position and is (C_{1-4})alkyl or ethenyl optionally substituted with any of the groups listed above for R^3 and/or 0 to 3 groups R^{12} independently selected from:

thiol; halogen; (C_{1-6})alkylthio; trifluoromethyl; azido; (C_{1-6})alkoxycarbonyl; (C_{1-6})alkylcarbonyl; (C_{2-6})alkenyloxycarbonyl; (C_{2-6})alkenylcarbonyl; hydroxy optionally substituted by (C_{1-6})alkyl, (C_{2-6})alkenyl, (C_{1-6})alkoxycarbonyl, (C_{1-6})alkylcarbonyl, (C_{2-6})alkenyloxycarbonyl, (C_{2-6})alkenylcarbonyl or aminocarbonyl wherein the amino group is optionally substituted by (C_{1-6})alkyl, (C_{2-6})alkenyl, (C_{1-6})alkylcarbonyl or (C_{2-6})alkenylcarbonyl; amino optionally mono- or disubstituted by (C_{1-6})alkoxycarbonyl, (C_{1-6})alkylcarbonyl, (C_{2-6})alkenyloxycarbonyl, (C_{2-6})alkenylcarbonyl, (C_{1-6})alkyl, (C_{2-6})alkenyl, (C_{1-6})alkylsulphonyl, (C_{2-6})alkenylsulphonyl or aminocarbonyl wherein the amino group is optionally substituted by (C_{1-6})alkyl or (C_{2-6})alkenyl; aminocarbonyl wherein the amino group is optionally substituted by (C_{1-6})alkyl, hydroxy(C_{1-6})alkyl, aminocarbonyl(C_{1-6})alkyl, (C_{2-6})alkenyl, (C_{1-6})alkoxycarbonyl, (C_{1-6})alkylcarbonyl, (C_{2-6})alkenyloxycarbonyl or (C_{2-6})alkenylcarbonyl and optionally further substituted by (C_{1-6})alkyl, hydroxy(C_{1-6})alkyl, aminocarbonyl(C_{1-6})alkyl or (C_{2-6})alkenyl; oxo; (C_{1-6})alkylsulphonyl; (C_{2-6})alkenylsulphonyl; or (C_{1-6})aminosulphonyl wherein the amino group is optionally substituted by (C_{1-6})alkyl or (C_{2-6})alkenyl; provided that when R^3 is disubstituted with hydroxy or amino and carboxy containing substituents these may optionally together form a cyclic ester or amide linkage, respectively;

wherein R^{10} is selected from (C_{1-4})alkyl; (C_{2-4})alkenyl; aryl; a group R^{12} as defined above; carboxy; aminocarbonyl wherein the amino group is optionally substituted by hydroxy, (C_{1-6})alkyl, (C_{2-6})alkenyl, (C_{1-6})alkylsulphonyl, trifluoromethylsulphonyl, (C_{12-6})alkenylsulphonyl, (C_{1-6})alkoxycarbonyl, (C_{1-6})alkylcarbonyl, (C_{2-6})alkenyloxycarbonyl or (C_{2-6})alkenylcarbonyl and optionally further substituted by (C_{1-6})alkyl or (C_{2-6})alkenyl; cyano; or tetrazolyl;

R^4 is a group $-CH_2-R^5$ in which R^5 is selected from:
(C_{3-12})alkyl; hydroxy(C_{3-12})alkyl; (C_{1-12})alkoxy(C_{3-12})alkyl; (C_{1-12})alkanoyloxy(C_{3-12})alkyl; (C_{3-6})cycloalkyl(C_{3-12})alkyl; hydroxy-, (C_{1-12})alkoxy- or (C_{1-12})alkanoyloxy-(C_{3-6})cycloalkyl(C_{3-12})alkyl; cyano(C_{3-12})alkyl; (C_{2-12})alkenyl; (C_{2-12})alkynyl; tetrahydrofuryl; mono- or di-(C_{1-12})alkylamino(C_{3-12})alkyl; acylamino(C_{3-12})alkyl; (C_{1-12})alkyl- or acyl-aminocarbonyl(C_{3-12})alkyl; mono- or di- (C_{1-12})alkylamino(hydroxy) (C_{3-12})alkyl; optionally substituted phenyl(C_{1-2})alkyl, phenoxy(C_{1-2})alkyl or phenyl(hydroxy)(C_{1-2})alkyl; optionally substituted diphenyl(C_{1-2})alkyl; optionally substituted phenyl(C_{2-3})alkenyl; optionally substituted benzoyl or benzoyl(C_{1-3})alkyl; optionally substituted heteroaryl or heteroaryl(C_{1-2})alkyl;and optionally substituted heteroaroyl or heteroaroylmethyl;

n is 0, 1 or 2;
AB is $NR^{11}CO$, $CO-CR^8R^9$ or $CR^6R^7-CR^8R^9$ or when n is 1 or 2, AB may instead be $O-CR^8R^9$ or $NR^{11}-CR^8R^9$, or when n is 2 AB may instead be $CR^6R^7-NR^{11}$ or CR^6R^7-O, provided that when n is 0, B is not CH(OH),
and wherein:
each of R^6 and R^7, R^8 and R^9 is independently selected from: H; thiol; (C_{1-6})alkylthio; halo; trifluoromethyl; azido; (C_{1-6})alkyl; (C_{2-6})alkenyl; (C_{1-6})alkoxycarbonyl; (C_{1-6})alkylcarbonyl; (C_{2-6})alkenyloxycarbonyl; (C_{2-6})alkenylcarbonyl; hydroxy, amino or aminocarbonyl optionally substituted as for corresponding substituents in R^3; (C_{1-6})alkylsulphonyl; (C_{2-6})alkenylsulphonyl; or (C_{1-6})aminosulphonyl wherein the amino group is optionally substituted by (C_{1-6})alkyl or (C_{1-6})alkenyl;
or R^6 and R^8 together represent a bond and R^7 and R^9 are as above defined;
and each R^{11} is independently H, trifluoromethyl, (C_{1-6})alkyl, (C_{12-6})alkenyl, (C_{1-6})alkoxycarbonyl, (C_{1-6})alkylcarbonyl, aminocarbonyl wherein the amino group is optionally substituted by (C_{1-6})alkoxycarbonyl, (C_{1-6})alkylcarbonyl,

(C_{1-6})alkenyloxycarbonyl, (C_{2-6})alkenylcarbonyl, (C_{1-6})alkyl or (C_{1-6})alkenyl and optionally further substituted by (C_{1-6})alkyl or (C_{1-6})alkenyl;

or where one of R^3 and R^6, R^7, R^8 or R^9 contains a carboxy group and the other contains a hydroxy or amino group they may together form a cyclic ester or amide linkage

wherein

'heterocyclic' is an aromatic and non-aromatic, single or fused, ring containing up to four hetero-atoms in each ring selected from oxygen, nitrogen and sulphur, and having from 4 to 7 ring atoms, which rings may be unsubstituted or substituted by up to three groups selected from amino, halogen, (C_{1-6})alkyl, (C_{1-6})alkoxy, halo(C_{1-6})alkyl, hydroxy, carboxy, carboxy salts, (C_{1-6})alkoxycarbonyl, (C_{1-6})alkoxycarbonyl(C_{1-6})alkyl, aryl, and oxo groups, and wherein any amino group forming part of a single or fused non-aromatic heterocyclic ring as defined above is optionally substituted by (C_{1-6})alkyl optionally substituted by hydroxy, (C_{1-6})alkoxy, thiol, (C_{1-6})alkylthio, halo or trifluoromethyl, acyl or (C_{1-6})alkylsulphonyl groups;

'aryl' is phenyl or naphthyl, optionally substituted with up to five groups selected from halogen, mercapto, (C_{1-6})alkyl, phenyl, (C_{1-6})alkoxy, hydroxy(C_{1-6})alkyl, mercapto (C_{1-6})alkyl, halo(C_{1-6})alkyl, hydroxy, amino, nitro, cyano, carboxy, (C_{1-6})alkylcarbonyloxy, (C_{1-6})alkoxycarbonyl, formyl and (C_{1-6})alkylcarbonyl groups;

'acyl' is (C_{1-6})alkoxycarbonyl, formyl or (C_{1-6}) alkylcarbonyl.

2 **(Original)**. A compound according to claim 1 wherein one of Z^1, Z^2, Z^3, Z^4 and Z^5 is N and one of Z^3 and Z^5 if not N is CR^{1a} and the remainder are CH, or one of Z^1, Z^2, Z^3, Z^4 and Z^5 is CR^{1a} and the remainder are CH.

3 **(Currently Amended)**. A compound according to claim 2 wherein Z^5 is CH or N, Z^3 is CH or CF and Z^1, Z^2 and Z^4 are each CH, or Z^1 is N, Z^3 is CH or CF and Z^2, Z^4 and Z^5 are each CH.

4. **(Previously Presented)**. A compound according to claim 1 wherein R^1 is methoxy, amino(C_{3-5})alkyloxy, guanidino(C_{3-5})alkyloxy, piperidyl(C_{3-5})alkyloxy, nitro or fluoro.

5 **(Currently Amended)**. A compound according to claim 1 wherein R^3 is hydrogen, (C_{1-4}) alkyl, ethenyl **or** optionally substituted 1-hydroxy-(C_{1-4}) alkyl~~;~~; or R^3 contains carboxy, optionally substituted aminocarbonyl, cyano or 2-oxo-oxazolidinyl optionally substituted by R^{10}~~;~~ and **wherein R^3** is in the 3-position.

6 **(Previously Presented)**. A compound according to claim 1 wherein n is 0 and either A is CHOH and B is CH_2 or A is NH and B is CO.

7 **(Previously Presented)**. A compound according to claim 1 wherein R^4 is (C_{5-10})alkyl, unsubstituted phenyl(C_{2-3})alkyl or unsubstituted phenyl(C_{3-4})alkenyl.

8 **(Currently Amended)**. A compound according to claim 1 selected from:

[2S]-1-Heptyl-4-[2-(R,S)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]-2-hydroxymethylpiperazine~~;~~[2R]-1-Heptyl-4-[2-(R,S)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]-2-hydroxymethylpiperazine~~;~~

[2S]-1-Heptyl-4-[2-(R)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]-2-hydroxymethylpiperazine dioxalate~~;~~

[2S]-1-Heptyl-4-[2-(S)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]-2-hydroxymethylpiperazine dioxalate~~;~~

[2R]-1-Heptyl-4-[2-(S)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]-2-hydroxymethylpiperazine dioxalate~~;~~

[2R]-1-Heptyl-4-[2-(R)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]-2-hydroxymethylpiperazine dioxalate~~;~~

[2R,S]-1-Heptyl-2-hydroxyethyl-4-[2-(R,S)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine~~;~~

[2R,S]-2-Carboxymethyl-1-heptyl-4-[2-(R,S)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine trihydrochloride~~;~~

[2S]-2-Carboxymethyl-1-heptyl-4-[2-(R,S)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine trihydrochloride~~;~~

[2R]-2-Carboxymethyl-1-heptyl-4-[2-(R,S)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine trihydrochloride ~~;~~

[3R]-3-Carboxymethyl-1-heptyl-4-[2-(R)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine tris(trifluoroacetate) ~~;~~

[3S]-1-Heptyl-3-[2-hydroxyethyl]-4-[2-(R,S)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine dioxalate ~~;~~

[2S]-1-Heptyl-4-[2-(R,S)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]-2-hydroxyaminocarbonylmethylpiperazine ;

[2R]-1-Heptyl-2-cyanomethyl-4-[2-(R)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine dioxalate ;

[2R]-1-Heptyl-2-[2-aminoethyl]-4-[2-(R)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine dioxalate ;

1-Heptyl-4-[3-(6-methoxyquinolin-4-yl)propyl]piperazine ½ ;

1-Heptyl-4-[2-(R,S)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine ;

1-Heptyl-4-[2-(R)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine oxalate ;

1-Heptyl-4-[2-(S)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine oxalate ;

1-Octyl-4-[2-(R)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine oxalate ;

1-Hexyl-4-[2-(R)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine oxalate ½ ;1-(5-Methyl-1-hexyl)-4-[2-(R)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine oxalate ;

1-Heptyl-4-[N-(6-methoxyquinolin-4-yl)formamido]piperazine ;

[9aS, 3S]-3-(6-methoxyquinolin-4-yl)-8-heptylhexahydropyrazino [2,1-c][1,4]oxazin-3(4H)-one ;

[9aS,3R]-3-(6-methoxyquinolin-4-yl)-8-heptylhexahydropyrazino[2,1-c][1,4]oxazin-3(4H)-one ;

[9aR,3R]-(6-methoxy quinolin-4-yl)-8-heptylhexahydropyrazino[2,1-c][1,4]oxazine-3(4H)-one ;

[9aR,3S]-3-(6-methoxy quinolin-4-yl)-8-heptylhexahydropyrazino[2,1-c][1,4]oxazine-3(4H)-one ;

[3R]-1-Heptyl-3-[2-hydroxyethyl]-4-[2-(R,S)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine oxalate ;

[3R]-1-Heptyl-3-hydroxymethyl-4-[2-(R)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine ;

[3S]-1-Heptyl-3-hydroxymethyl-4-[2-(S)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine ;

[3S]-1-Heptyl-3-hydroxymethyl-4-[2-(R)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine ;

[3R]-1-Heptyl-3-hydroxymethyl-4-[2-(S)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine ;

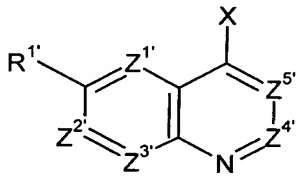
1-(3-phenoxypropyl)-4-[2-(R)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine **;**

1-[3-(3,4-Dimethoxyphenyl)-propyl]-4-[2-(R,S)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine **; and**

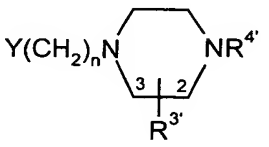
1-[3-(1,3-Dihydro-2-oxobenzimidazol-1-yl)-propyl]-4-[2-(R)-hydroxy-2-(6-methoxyquinolin-4-yl)ethyl]piperazine

9 **(Currently Amended)**. A process for preparing compounds of formula (I), or a pharmaceutically acceptable ~~**derivative**~~ **salt and/or N-oxide** thereof according to claim 1, which process comprises:

(a) reacting a compound of formula (IV) with a compound of formula (V):



(IV)



(V)

wherein Z^1, Z^2, Z^3, Z^4 and Z^5, m, n, R^1, R^3 and R^4 are as defined in formula (I), and X and Y may be the following combinations:

(i) X is M and Y is $CH_2CO_2R^x$, CH_2CHO or CH_2COW

(ii) X is CO_2R^y and Y is $CH_2CO_2R^x$

(iii) one of X and Y is $CH{=}SPh_2$ and the other is CHO

(iv) X is CH_3 and Y is CHO

(v) X is CH_3 and Y is CO_2R^x

(vi) X is $CH_2CO_2R^y$ and Y is CO_2R^x

(vii) X is $CH{=}PR^z{}_3$ and Y is CHO

(viii) X is CHO and Y is $CH{=}PR^z{}_3$

(ix) X is halogen and Y is $CH{=}CH_2$

(x) one of X and Y is COW and the other is $NHR^{11'}$ ~~**or NCO**~~

(xi) one of X and Y is $(CH_2)_p$-W and the other is $(CH_2)_qNHR^{11'}$ or $(CH_2)_qOH$

(xii) one of X and Y is CHO and the other is $NHR^{11'}$,

or where n=0

(xiii) X is A-B-$(CH_2)_n$-W or A-B-$(CH_2)_{n-1}$-CHO and Y is H

(xiv) X is NCO and Y is H

(xv) X is CH_3 and Y is H

(xvi) X is $COCH_2W$ and Y is H

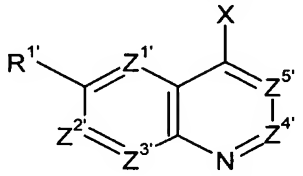
(xvii) X is $CH{=}CH_2$ and Y is H

(xviii) X is oxirane and Y is H

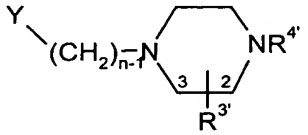
in which W is a leaving group, R^x and R^y are (C_{1-6})alkyl and R^z is aryl or (C_{1-6})alkyl;

or

(b) reacting a compound of formula (IV) with a compound of formula (Vb):



(IV)



(Vb)

wherein Z^1, Z^2, Z^3, Z^4 and Z^5, m, n, R^1, R^3 and R^4 are as defined in formula (I), X is $CH_2NHR^{11'}$ and Y is CHO or COW;

in which $Z^{1'}$, $Z^{2'}$, $Z^{3'}$, $Z^{4'}$, $Z^{5'}$, $R^{11'}$, $R^{1'}$, $R^{3'}$ and $R^{4'}$ are Z^1, Z^2, Z^3, Z^4, Z^5, R^{11}, R^1, R^3 and R^4 or groups convertible thereto, and thereafter optionally or as necessary converting $Z^{1'}$, $Z^{2'}$, $Z^{3'}$, $Z^{4'}$, $Z^{5'}$, $R^{11'}$, $R^{1'}$, $R^{3'}$ and $R^{4'}$ to Z^1, Z^2, Z^3, Z^4, Z^5, $R^{11'}$, R^1, R^3 and R^4, converting A-B to other A-B, interconverting Z^1, Z^2, Z^3, Z^4, Z^5, R^{11}, R^1, R^3 and/or R^4 and forming a pharmaceutically acceptable ~~derivative~~ **salt/and or N-oxide** thereof.

10 **(Currently Amended)**. A pharmaceutical composition comprising a compound of formula (I) or a pharmaceutically acceptable ~~derivative~~ **salt/and or N-oxide** thereof according to claim 1, and a pharmaceutically acceptable carrier.

11 **(Currently Amended)**. A method of treatment of bacterial infections in mammals, particularly in man, which method comprises the administration to a mammal in need of such treatment of an effective amount of a compound of formula (I) or a pharmaceutically acceptable ~~derivative~~ **salt/and or N-oxide** thereof according to claim 1.

12. **(Cancelled)**.

13. **(Cancelled)**.